# URINARY INCONTINENCE IN LONGSTAY MENTAL PATIENTS

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URINARY incontinence is a major problem in the nursing care of patients in psychiatric hospitals, and the tendency has been to regard it as an inevitable concomitant of old age or advanced mental illness. Now, however, there is a more dynamic and physiological approach to the condition (Vincent, 1959), and it is worthwhile to review the situation and assess the background against which the newer methods of treatment could subsequently be tried.

## METHOD.

Purdysburn Hospital is the largest mental hospital in Northern Ireland and the bed complement, which varies between 1,800 and 1,900, represents 95 per cent. of all mental in-patients formerly resident in the city of Belfast. Over a two-day period every unit in the hospital was visited and 1,837 case notes were studied by us and details were noted of the patient's name, age, status, date of admission, diagnosis, sphincteric control, and whether or not they were bed-ridden. In some instances where a patient had been in the hospital for many years an interview was necessary to reassess the diagnosis in terms of current terminology, using the established nomenclature of diseases as a basis.

1. All patients registered under Act of Parliament) as requiring Special Care	Mental Deficiency Group
2. All schizophrenic disorders, including para-) phrenia and schizo-affective states	Schizophrenic Group.
3. All psychoses and confusional states primarily) due to arteriopathic disorder	Arteriosclerotic Group.
4. Psychosis, dementia or degeneration of the brain attributable to the senium	Senile Group.
disease	Presenile Group.
6. The affective disorders	Affective Group.
7. Diseases, syndromes and addictions due to) alcohol	
8. Organic brain disease other than conditions) listed elsewhere	Organic Group.
9. Paranoid states, personality disorders and psychopathies, psychoneurosis	Others.
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For the purpose of this survey patients were considered to be incontinent when, despite routine or habit training methods, they remained irresponsibly incontinent by day and by night and had been so for at least three months. These strict criteria eliminated those patients who were only occasionally incontinent or who would have been incontinent had it not been for active nursing attention. Longstay patients were considered to be those who had been under the care of the hospital for at least one year since the date of their last admission, and bed-ridden patients those who were not out of bed for longer than two hours in any one day.

### RESULTS.

Patients considered to be suitable for inclusion in the survey numbered 1,700 and of these 314 (18.5 per cent.) were found to be incontinent, of whom 118 were male (representing 14.2 per cent. of the male population) and 196 were female (22.6 per cent. of the female population). In the series only 59 were bedridden, but of these 49 were incontinent (43 female, 6 male).

The total hospital population and the incontinent patients were then considered in age, sex, and diagnostic sub-groups. In each sub-group the observed number of incontinent patients was compared with the expected number taking the series as a whole. Examination of the results thus tabulated showed significantly more observed than expected incontinence in three groups:—

- 1. Mentally deficient females (25 observed, 16.76 expected,  $\chi^2 = 4.06$ ).
- 2. Females in the arteriosclerotic group (75 observed, 51.77 expected,  $\chi^2 = 10.44$ ).
- 3. Males in the senile group (15 observed, 8.48 expected,  $\chi^2 = 5.01$ ).

Whereas significantly less incontinence than expected was found in three groups:—

- 1. Males in the schizophrenic group (45 observed, 63.28 expected,  $\chi^2 = 5.29$ ).
- 2. Males in the organic group (4 observed, 11.35 expected,  $\chi^2 = 4.76$ ).
- 3. Males in the affective group (1 observed, 7.91 expected,  $\chi^2 = 6.05$ ).

The population in the groups presentle, alcoholic and others was too small for comparison to be made and no other findings were significant at the P > 0.05 level.

# Discussion.

The finding that in general there is a higher rate of incontinence amongst the female patients is in agreement with the observations of Adams and Cheeseman (1951) in geriatric patients.

In considering the various sub-groups in which significant findings were noted, various factors were seen to be at work.

In the mental deficiency group there was a significantly greater amount of incontinence in females under the age of 50 as compared with the series as a

whole. This is probably explainable by the interplay of other inconstant factors, for this group as defined consisted of a wide variety of mental defectives ranging, for example, from frank idiots to high grade feeble-mindedness with a comparatively high I.Q. A disproportionately large number of low level mental defectives amongst the females could account for the relatively greater incontinence rate.

In the arteriosclerotic and senile groups two important variable factors are at work, namely, the occurrence of local genito-urinary disease, notably prostatic in the male and gynæcological in the female, and the fact that the stage of the disease process at which the patients are hospitalized differs with social and economic circumstances. In the arteriosclerotic group females showed relatively more incontinence as might be expected, but even allowing for the greater liability of the female it is difficult to understand why the males of the group did not have more incontinence than the series as a whole. A similar disparity is seen in the senile group where males showed significantly more incontinence, this time in contradistinction to the females.

In both these groups there was a steady increase in the proportion of incontinence with each older age group. This is at variance with the findings of Thompson (1949), who observed that in a series of elderly chronic sick in Birmingham there was little difference in the age groups 60-69, 70-79, and over 80, and concluded that "incontinence in either sex was not a consequence of old age."

In the schizophrenic group males were found to have significantly less incontinence whilst the same was not true of females. This is possibly an indication of the greater effectiveness of habit training methods in the male patients.

The results in the affective group showed significantly less incontinence in males, but, although the figures are statistically significant, the numbers involved were too small to be of much clinical importance.

In the organic group results too are of less importance because of the multiple variable factors at work in this heterogeneous group which included patients suffering from post-encephalitic psychosis, general paresis of the insane, Huntington's chorea, multiple sclerosis, epileptic psychosis and brain tumour.

The high incidence of incontinence amongst bed-ridden patients is striking and is consistent with the views expressed by Warren (1943) and Wilson (1948), who emphasized the importance of avoiding confinement to bed.

Our overall impression is that except for the schizophrenic group which requires further investigation there is little basic difference between the incontinence in our patients and that found in geriatric patients. We believe that any newer methods of treatment that prove effective in these latter will equally be of benefit to incontinent patients in mental hospitals. This belief is based on the consideration that the difference between those patients forming the largest sub-groups in our series, i.e., arteriosclerotics and senile psychotics, and those in geriatric or general hospitals is essentially one of degree only, the disease process in each case being of the same underlying pathology.

### SUMMARY.

Seventeen hundred longstay mental patients were investigated and 314 (18.5 per cent.) were found to be incontinent of urine.

Breakdown into diagnostic, sex and age groups showed statistically more incontinence in comparison with the series as a whole in female mental defectives, female arteriosclerotics and male senile psychotics, and significantly less in male schizophrenics.

Relatively few patients in the series were bedridden, but 85 per cent. of these were incontinent. The importance of avoiding confinement to bed is emphasized.

Senile and arteriosclerotic patients constitute the main problem as they do in general and geriatric hospitals.

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#### REFERENCES.

Adams, G. F., and Cheeseman, E. A. (1951). Old People in Northern Ireland, Belfast, Northern Ireland Hospitals Authority.

THOMSON, A. P. (1949). Brit. med. J., 2, 243.

VINCENT, S. A. (1959). Ulster med. J., 28, 176.

WARREN, M. W. (1943). Brit. med. J., 2, 822.

WILSON, T. S. (1948). Lancet, 2, 374.

# REVIEW

PSYCHOSOMATIC METHODS IN PAINLESS CHILDBIRTH. By L. Chertok. (Pp. xvi+257. 35s.) London: Pergamon Press, 1959.

This book consists of twelve chapters with a bibliography of five hundred and eighty-seven references.

Each chapter consists largely of relevant quotations from the reference books and there is very little original thought in the whole composition.

The author has overlooked the fact that, quite apart from any organised psychosomatic methods, the duration of labour has shortened considerably over the last twenty years. This is largely due to an altered attitude on the part of the patient, better education, and the virtual disappearance of rickets.

Much of what the author claims for psychosomatic methods can be attained by such a simple therapeutic remedy as raspberry tea.

It is difficult to see the value of this publication.

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